

# **MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY**

**Dutchcraft, Inc.  
0050 South 375 West  
LaGrange, Indiana 46761**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 087-13611-00037	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality Original signed by Paul Dubenetzky	Issuance Date:  March 26 2001

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a manufacturer of wooden van conversion cabinets

Authorized Individual: **Dutchcraft, Inc.**  
Source Address: **0050 South 375 West, LaGrange, IN 46761**  
Mailing Address: **0050 South 375 West, LaGrange, IN 46761**  
Phone Number: **(219)-463-8366**  
SIC Code: **6626**  
County Location: **LaGrange**  
County Status: **Attainment for all criteria pollutants**  
Source Status: **Minor Source Operating Permit**  
**Minor Source under PSD rules**  
**Minor Source, Section 112 of the Clean Air Act**

### A.2 Emissions units and Pollution Control Equipment Summary

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This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) One (1) Spray Paint booth designated PB<sub>1</sub>, capable of processing wood cabinets at a rate of 8.89 units per hour, using dry filters to control PM emissions, exhausting through stacks designated as V<sub>1</sub> and V<sub>2</sub>.
- (b) Woodworking Equipment and assembly operations including saws, routers and drills, capable of processing wood at a rate of 111 lbs/hr, using five (5) dust collectors to control PM emissions, exhausting through stacks designated as P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub> and P<sub>5</sub>.
- (c) Three (3) natural gas fired small furnaces designated as F<sub>3</sub>, F<sub>4</sub> and F<sub>5</sub> with a total capacity of 0.75 MMBtu/hr.

## **SECTION B GENERAL CONSTRUCTION CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

### **B.1 Permit No Defense [IC 13]**

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This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **B.2 Definitions**

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

### **B.3 Effective Date of the Permit [IC13-15-5-3]**

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Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

### **B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]**

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Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5 Modification to Permit [326 IAC 2]**

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Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### **B.6 Minor Source Operating Permit [326 IAC 2-6.1]**

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This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
  - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
  - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of all criteria pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.

### C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

### C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the “authorized individual” as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.



- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

#### C.7 Opacity [326 IAC 5-1]

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Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.8 Fugitive Dust Emissions [326 IAC 6-4]

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The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### C.9 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

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Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on January 24, 2001. The plan consists of:

- (a) The source shall apply water on all unpaved roadways on an 'as needed' basis such that the visible emission conditions under 326 IAC 5-1 are met.

### Testing Requirements

#### C.10 Performance Testing [326 IAC 3-6]

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- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

### **Compliance Monitoring Requirements**

#### **C.11 Compliance Monitoring [326 IAC 2-1.1-11]**

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

#### **C.12 Monitoring Methods [326 IAC 3]**

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

#### **C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]**

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
- (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

- (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
  - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

**C.14 Actions Related to Noncompliance Demonstrated by a Stack Test**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

## **Record Keeping and Reporting Requirements**

### **C.15 Malfunctions Report [326 IAC 1-6-2]**

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Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

### **C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]**

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- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

**C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]**

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- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

**C18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]**

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- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, a quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report(s) does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) A malfunction as described in 326 IAC 1-6-2; or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.19 Annual Notification [326 IAC 2-6.1-5(a)(5)]

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- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:  
  
Compliance Data Section, Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015
- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

One spray booth, designated as PB<sub>1</sub>, capable of processing wood cabinets at a rate of 8.89 units per hour, using dry filters to control PM emissions, exhausting through stacks designated as V<sub>1</sub> and V<sub>2</sub>. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Any change or modification which would increase actual emissions of VOC for coating wood to fifteen (15) pounds per day or more shall obtain prior approval from IDEM, OAQ and shall be subject to the requirements of 326 IAC 8-2-12.

#### D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 087-9368-00037 issued on February 24, 1998, the PM from the paint booth shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

### Compliance Determination Requirements

#### D.1.4 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.1.5 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each day based on the total volatile organic compound usage for the most recent day.

### Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

#### D.1.6 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the paint booths (PB1) is in operation.

#### D.1.7 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading



of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (V1, V2) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### **Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

##### **D.1.8 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
  - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The cleanup solvent usage for each day;
  - (4) The total VOC usage for each day; and
  - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2

## EMISSIONS UNIT OPERATION CONDITIONS

Woodworking equipment and assembly operations including saws, routers, and drills, capable of processing wood at a rate of 111 pounds per hour, using five (5) dust collectors to control PM emissions, exhausting through stacks designated as P1, P2, P3, P4 and P5.  
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards

#### D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the woodworking facilities shall not exceed 0.551 pounds per hour when operating at a process weight rate of 111 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

### Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

#### D.2.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.2.3 Particulate Matter (PM)

Pursuant to CP-087-9368-00037, issued on 02-24-98, dust collectors for PM control shall be in operation at all times when the woodworking machines are in operation.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

**Company Name:** Dutchcraft, Inc.

**Address:** 0050 South 375 West,

**City:** LaGrange

**Phone #:** (219)-463-8366

**MSOP #:** 087-13611-00037

I hereby certify that **Dutchcraft, Inc.** is ☒ still in operation.  
☐ no longer in operation.

I hereby certify that **Dutchcraft, Inc.** is ☒ in compliance with the requirements of MSOP **087-13611-00037**.  
☐ not in compliance with the requirements of MSOP **087-13611-00037**.

**Authorized Individual (typed):**

**Title:**

**Signature:**

**Date:**

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

**Noncompliance:**



**Please note - This form should only be used to report malfunctions  
applicable to Rule 326 IAC 1-6 and to qualify for  
the exemption under 326 IAC 1-6-4.**

### **326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

### **326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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**Indiana Department of Environmental Management  
Office of Air Quality**

**Technical Support Document (TSD) for a Minor Source Operating Permit  
(MSOP)**

**Source Name:** Dutchcraft, Inc.  
**Source Location:** 0050 South 375 West, LaGrange, IN 46761  
**County:** LaGrange  
**SIC Code:** 6626  
**Operation Permit No:** 087-13611-00037  
**Permit Reviewer:** Mohammad Khan

The Office of Air Quality (OAQ) has reviewed an application from Dutchcraft, Inc. involved with the Manufacture of Wooden Van Conversion Cabinets and painting operations.

**Permitted Emission Units and Pollution Control Equipments:**

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) Spray Paint booth designated PB<sub>1</sub>, capable of processing wood cabinets at a rate of 8.89 units per hour, using dry filters to control PM emissions, exhausting through stacks designated as V<sub>1</sub> and V<sub>2</sub>.
- (b) Woodworking Equipment and assembly operations including saws, routers and drills, capable of processing wood at a rate of 111 lbs/hr, using five (5) dust collectors to control PM emissions, exhausting through stacks designated as P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub> and P<sub>5</sub>.
- (c) Three (3) natural gas fired small furnaces designated as F<sub>3</sub>, F<sub>4</sub> and F<sub>5</sub> with a total capacity of 0.75 MMBtu/hr.

**Existing Approvals**

The source is registered. It is operating under registration 087-9368 issued February 24, 1998. This registration was based upon the concept of the woodworking emissions determined after controls.

**Enforcement Issue**

The source did not obtain an MSOP by December 25, 1999. Therefore, an enforcement referral is being made. IDEM is reviewing this matter and will take appropriate action.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
V <sub>1</sub>	To allow exhaust from the spray booth	26	1.50	4,000	70
V <sub>2</sub>	To allow exhaust from the spray booth	26	1.50	4,000	70
F <sub>3</sub>	To exhaust	16	0.67	Variable	70
F <sub>4</sub>	To exhaust	16	0.67	Variable	70
F <sub>5</sub>	To exhaust	16	0.67	Variable	70

### Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 13, 2000.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations ( four pages).

Additionally, there are woodworking operations at the plant. These emissions are calculated based upon the outlet grain loading of the dust collector controlling the woodworking emission unit.

Emission units: Process	Flow rate (ft3/min.)	Loading (gr/dscf)	PM/PM-10 (Lb/hr)	PM/PM-10 ( tons/yr )
P <sub>1</sub>	2000	0.0017	0.03	0.13
P <sub>2</sub>	2000	0.0017	0.03	0.13
P <sub>3</sub>	1000	0.0015	0.01	0.04
P <sub>4</sub>	500	0.0014	0.01	0.03
P <sub>5</sub>	500	0.0014	0.01	0.03
<b>Totals</b>				0.36

This would determine the emissions after controls. The efficiency of the dust collectors is 99%. Therefore, the emissions before controls for the woodworking would be  $0.36/0.01 = 36$  tons of PM per year.

To determine compliance with rule 6-3-2, the following calculation is made

For a process weight rate of 111 pounds per hour, then the E value is determined to be:

$$E = (4.1)(P)^{0.67}$$

$$E = (4.1)(111/2000)^{0.67}$$

$$= 0.551 \text{ lb/hr}$$

Where: E = rate of emission in Lb/hr and  
 P = process weight in tons/hr

Therefore, based upon the values from the table, these emissions units meet rule 6-3-2.

### Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM/PM 10	47.9
SO <sub>2</sub>	0.0
VOC	10.7
CO	0.1
NOx	0.3

HAPs	Potential to Emit ( tons/yr )
Xylene	1.70
Butyl acetate	1.79
Toluene	1.23
Methyl benzene	1.23
Other HAPs	< 4.75
Total	< 10.7

The potential to emit of particulate matter emissions are greater than 25 tons per year. Therefore, a minor source operating permit (MSOP) will be issued to the source.



## County Attainment Status

The source is located in LaGrange County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. LaGrange County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) LaGrange County has been classified as attainment or unclassifiable for PM, SO<sub>2</sub>, NO<sub>x</sub>, and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions  
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21 or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

## Source Status

Existing Source PSD definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM/PM 10	12.3
SO <sub>2</sub>	0.0
VOC	10.7
CO	0.1
NO <sub>x</sub>	0.3
Single HAP	1.8
Combination of HAP	< 10.7

This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

## **Part 70 Permit Determination**

### **326 IAC 2-7 (Part 70 Permit Program)**

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year.
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

## **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) This source is not covered by 40 CFR part 63, subpart JJ ( National Emission Standards for Wood Furniture Manufacturing Operations ), because this source is not a major source as defined in 40 CFR part 63.2.

## **State Rule Applicability - Entire Source**

### **326 IAC 2-6 (Emission Reporting)**

This source is in LaGrange County and its potential to emit PM-10 is less than 100 tons per year. Therefore, rule 2-6 does not apply.

### **326 IAC 5-1 (Visible Emissions Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

## **State Rule Applicability - Individual Facilities**

### **326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)) July 27, 1997.**

The operation of the paint booth will emit a single HAP less than 10 tons per year or a combination of HAPs less than 25 tons per year. Therefore, this rule will not apply.

### **326 IAC 6-3-2 (Particulate Emission Limitation for Process Operations)**

The particulate matter emissions from the woodworking operations shall be limited to less than 0.551 pounds per hour. This is based on a process weight of 111 pounds per hour.

The particulate matter emissions from the paint booth shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of this equation:

$$E = (4.1)(P)^{0.67}$$

Where E : rate of emission in pounds per hour  
P : process weight rate in tons per hour

#### 326 IAC 6-4 ( Fugitive Dust Emissions )

This rule requires the source not to generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way or easement of which the source is located.

#### 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

The source shall apply water on all unpaved roadways on an "as needed" basis such that the visible emission conditions under 326 IAC 5-1 are met.

#### 326 IAC 8-2-1 (Surface Coating emission limitations)

This rule does not apply because the actual emissions of VOC are less than 15 pounds per day.

### Conclusion

The operation of the woodworking and painting operations shall be subject to the conditions of the attached **Minor Source Operating Permit 087-13611-00037**.

**Appendix A: Emissions Calculations**

page 1 of 4 TDS App A

**Natural Gas Combustion Only****MM BTU/HR 0.3 - <10****Manufacture of Wooden Van Conversion Cabinet and spray coatings****Company Name: Dutchcraft, Inc.****Address City IN Zip: 0050 South 375 West, LaGrange, In 4676 IN 46761****CP: 087-13611****Plt ID: 087-00037****Reviewer: Mohammad Khan****Date: January 04, 01**

Heat Input Capacity

MMBtu/hr

0.8

Potential Throughput

MMCF/yr

6.6

**Pollutant**

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	11.9	11.9	0.6	100.0	5.3	21.0
Potential Emission in tons/yr	0.0	0.0	0.0	0.3	0.0	0.1

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-03-006-03

(SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**

page 2 of 4 TDS App A

**Natural Gas Combustion Only****MM BTU/HR 0.3 < 10****Manufacture of Wooden Van Conversion Cabinets and spray coatings****HAPs Emissions****Company Name: Dutchcraft, Inc.****Address City IN Zip: 0050 South 375 West, LaGrange, IN 46761****CP: 087-13611****Plt ID: 087-00037****Reviewer: Mohammad Khan****Date: January 04, 01****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	6.899E-06	3.942E-06	2.464E-04	5.913E-03	1.117E-05

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.643E-06	3.614E-06	4.599E-06	1.248E-06	6.899E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations**

page 1 of 4 TDS App A

**Natural Gas Combustion Only****MM BTU/HR 0.3 - <10****Manufacture of Wooden Van Conversion Cabinet and spray coatings****Company Name: Dutchcraft, Inc.****Address City IN Zip: 0050 South 375 West, LaGrange, In 4676 IN 46761****CP: 087-13611****Plt ID: 087-00037****Reviewer: Mohammad Khan****Date: January 04, 01**

Heat Input Capacity

MMBtu/hr

0.8

Potential Throughput

MMCF/yr

6.6

**Pollutant**

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	11.9	11.9	0.6	100.0	5.3	21.0
Potential Emission in tons/yr	0.0	0.0	0.0	0.3	0.0	0.1

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-03-006-03

(SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**

page 2 of 4 TDS App A

**Natural Gas Combustion Only****MM BTU/HR 0.3 < 10****Manufacture of Wooden Van Conversion Cabinets and spray coatings****HAPs Emissions****Company Name: Dutchcraft, Inc.****Address City IN Zip: 0050 South 375 West, LaGrange, IN 46761****CP: 087-13611****Plt ID: 087-00037****Reviewer: Mohammad Khan****Date: January 04, 01****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	6.899E-06	3.942E-06	2.464E-04	5.913E-03	1.117E-05

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.643E-06	3.614E-06	4.599E-06	1.248E-06	6.899E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations**  
**VOC and Particulate**  
**From Surface Coating Operations**  
**Manufacturer of Wooden Van Conversion Cabinet and spray coatings**  
**Company Name: Dutchcraft, Inc.**  
**Address City IN Zip: 0050 South 375 West, LaGrange, IN 46761**  
**CP: 087-13611**  
**Plt ID: 087-00037**  
**Reviewer: Mohammad Khan**  
**Date: Jan 3rd, 01**

Material name and ID	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Topcoat spray	7.8	64.43%	0.0%	64.4%	0.0%	88.16%	0.00540	9.250	5.05	5.05	0.25	6.06	1.11	0.00	5.73	100%
Sealer spray	7.6	68.13%	0.0%	68.1%	0.0%	23.49%	0.01400	9.250	5.18	5.18	0.67	16.09	2.94	0.00	22.04	100%
Stain oak spice	7.4	96.24%	0.0%	96.2%	0.0%	1.70%	0.00600	9.250	7.10	7.10	0.39	9.46	1.33	0.07	417.79	
N-Butyl Acetate	7.4	100.00%	0.0%	100.0%	0.0%	0.00%	0.00600	9.250	7.35	7.35	0.41	9.79	1.79	0.00	ERR	
Booth coating	7.8	75.56%	22.0%	53.6%	20.5%	17.00%	0.00800	9.250	5.24	4.16	0.31	7.39	1.35	0.62	24.48	
Cleanup solv	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	0.00800	9.250	6.90	6.90	0.51	12.25	2.24	0.00	ERR	

**State Potential Emissions****Add worst case coating to all solvents****2.54****61.04****10.74****0.68**

Actual Emissions

0.08

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used



**Appendix A: Emissions Calculations****VOC and Particulate****From Surface Coating Operations****Manufacturer of Wooden Van Conversion Cabinet and spray coatings****Company Name: Dutchcraft, Inc.****Address City IN Zip: 0050 South 375 West, LaGrange, IN 46761****CP: 087-13611****Plt ID: 087-00037****Reviewer: Mohammad Khan****Date: Jan 3rd, 01**

Material name and ID	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Topcoat spray	7.8	64.43%	0.0%	64.4%	0.0%	88.16%	0.00540	9.250	5.05	5.05	0.25	6.06	1.11	0.00	5.73	100%
Sealer spray	7.6	68.13%	0.0%	68.1%	0.0%	23.49%	0.01400	9.250	5.18	5.18	0.67	16.09	2.94	0.00	22.04	100%
Stain oak spice	7.4	96.24%	0.0%	96.2%	0.0%	1.70%	0.00600	9.250	7.10	7.10	0.39	9.46	1.33	0.07	417.79	
N-Butyl Acetate	7.4	100.00%	0.0%	100.0%	0.0%	0.00%	0.00600	9.250	7.35	7.35	0.41	9.79	1.79	0.00	ERR	
Booth coating	7.8	75.56%	22.0%	53.6%	20.5%	17.00%	0.00800	9.250	5.24	4.16	0.31	7.39	1.35	0.62	24.48	
Cleanup solv	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	0.00800	9.250	6.90	6.90	0.51	12.25	2.24	0.00	ERR	

**State Potential Emissions****Add worst case coating to all solvents****2.54****61.04****10.74****0.68**

Actual Emissions

0.08

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

**Emission calculations of HAPs**

Company name :Dutchcraft, Inc

CP : 087-13611

Pit ID : 087-00037

Reviewer : Mohammad Khan

Date : Jan 17, 2001

For the spray coating operation, the following are the major HAPs to be emitted:

**Xylene** (7.4 Lb/gal) ( 0.946 Lb of xylene/ Lb of coating) ( 0.0006 gal/unit) ( 9.25 unit/hr) ( 8760 hr/yr) ( 1 ton/2000 Lb)  
**=1.70 TPY**

**Butyl Acetate**:(7.4 Lb/gal) ( 0.995 Lb of butyl acetate/Lb of coating) ( 0.006 gal/ unit) ( 9.25 unit/hr) ( 8760 hr/yr) ( 1ton/2000 Lb)  
**=1.79 TPY**

**Toluene**:( 7.8 Lb/gal) ( 0.49 Lb of toluene/Lb of coating) (0.008 gal/ unit) ( 9.25 unit/hr) ( 8760 hr/yr) ( 1 ton/2000 Lb)  
**= 1.23 TPY**

**Methyl benzene**:( 6.9 Lb/gal) ( 0.55 Lb of m.benzene/Lb of coating) ( 0.008 gal/unit) ( 9.25 unit/hr) ( 8760 hr/yr) (1 ton/2000 Lb)  
**= 1.23 TPY**

Based upon this information, the major HAP is determined to be Butyl Acetate.